ADDENDUM

DU-9 DREDGED MATERIAL MANAGEMENT AREA (DMMA)

Final Environmental Assessment (FEA) and FONSI

January 2004

1 PURPOSE

The purpose of this addendum is to summarize changes, revisions and corrections to the final EA/FONSI, dated July 2000, as a result of the discovery of contaminated soil and groundwater, involving sampling, testing and remediation of the contamination, and the redesign of the proposed Florida Inland Navigation District (FIND) DMMA.

2 BACKGROUND

Subsequent to the completion of the Final Environmental Assessment (June 2000) and the signed FONSI (July 19, 2000) and prior to construction, visual and olfactory evidence of contamination was discovered at DU-9 during excavation of a gopher tortoise burrow. Soil sampling by PPB Environmental Laboratories, Inc. documented the presence of petroleum hydrocarbon contaminants on the unimproved pasture (FLUCFS 212) within the DU-9 property. Subsequent records review revealed the EPA had previously evaluated the site in 1989. Duval Septic Company operated the Dee Dot Ranch Sludge Farm (DDRSF)[FDER Permit S016-23054 issued May 16, 1980 and expired June 1, 1983], which was permitted for the application of domestic and industrial waste sludge that was not hazardous or infectious. The company deposited permitted sludge into troughs on the property between May 1980 and May 1982. However, the company also deposited apparently non-permitted hazardous sludges from Cleaner Hanger Company, Roux Labs, Metal Container Corporation and Adcom Wire Company into the same troughs during this time frame. The soils and groundwater have now been demonstrated to be contaminated by a variety of chemicals, solvents and heavy metals. FIND had no prior knowledge of the contamination or that the EPA had first discovered it in 1989, the same year FIND began negotiations to purchase the site. The previous landowners, D.D.I. Inc., Estuary Corporation and Spanish Grant Estates Inc., were aware that the EPA had evaluated the site and were charged with the remediation responsibility.

3 DMMA DESIGN

Because the unimproved pasture (FLUCFS 212) is located at the approximate center of the site, the proposed DMMA footprint was redesigned from 102.8 acres to 38.4 acres. Accordingly, the original documented buffer area grew from 77.2 acres to 141.6 acres. It is anticipated once the remediation process is complete and the EPA and FDEP have cleared the site, that the reduced DMMA will be rebuilt to original design specifications. In order to obtain a modification to the original DEP Water Quality Certification construction permit (WQC), a bentonite slurry wall was designed to separate the contaminated groundwater from potential saltwater leaching that might occur after use of the DMMA. The slurry wall will be constructed from 100’ South of the southwestern DMMA corner and 300’ North of the northwestern most contaminated soils to the Eastern property boundary. It is anticipated that the slurry wall will prevent DMMA operations from affecting the groundwater contamination plume or exacerbating the extent of contamination.

4 FEA MODIFICATIONS (CORRECTIONS)

4.1 With regard to the FEA of July 2000, the following items are hereby corrected:

a. Table 2.1, page 6:

i) Water Quality, Alt. 2. Add: “Slurry wall would be placed between sludge disposal area and DMMA DU-9.”

ii) Wetlands, Alt. 2. Change “3.13” to “2.36 acres of wetlands impacts.”

iii) Hazardous Toxic Wastes, Alt. 2. Change “No impact” to “Revised dike layout and slurry wall would prevent further impacts from sludge disposal area contamination.”

b. Section 3.2.1. Groundwater Resources. Change to: “The site is located in the coastal plain with two underlying aquifer systems, the unconfined surficial aquifer and the confined Floridian aquifer below it. Approximately 250 residences within 4 miles of the site obtain their potable water from private wells. Approximately half of these wells draw from the Floridian aquifer and the other half from the surficial aquifer. Mean Groundwater flow is eastward towards the IWW. The Dee Dot Ranch Sludge Farm, which was permitted for the application of domestic and industrial waste sludge that was not hazardous or infectious, was operated onsite by Duval Septic Company. The company deposited both permitted and hazardous sludges into troughs on the central part of the property between May 1980 and May 1982. As a result, the groundwater under the central part of the site is contaminated by a variety of chemicals, solvents and heavy metals. The EPA has charged the previous landowners, D.D.I. Inc., Estuary Corporation and Spanish Grant Estates Inc., with the remediation responsibility and remediation is underway.”

c. Section 3.2.2. Surface Water Resources. Change to: “The site’s surface water flows through interconnected marshes into the IWW. These areas are located on the western and southern boundaries of the site and would remain within the buffer. Test results indicate that contaminants from the DDRSF are migrating down gradient through the surface water and underneath portions of the site.”

d. Section 3.13. HTRW. Change to: “Soil sampling by PPB Environmental Laboratories, Inc. conducted on January 11, 2001 documented the presence of contaminants on the unimproved pasture (FLUCFS 212) within the DU-9 property. Further investigation showed that the NUS Corporation conducted a Screening Site Inspection (SSI) for the EPA during the week of October 31, 1988 and recommended the site be reevaluated as a candidate for a Listing Site Inspection. Results of the SSI showed that the Duval Septic Company operated the Dee Dot Ranch Sludge Farm (DDRSF)[FDER Permit S016-23054 issued May 16, 1980 and expired June 1, 1983], which was permitted for the application of domestic and industrial waste sludges that were not hazardous or infectious. The company deposited permitted sludge into troughs on the property between May 1980 and May 1982. However, the company also deposited hazardous sludges from Cleaner Hanger Company, Roux Labs, Metal Container Corporation and Adcom Wire Company into these troughs during this time frame. As a result, the soils and groundwater are contaminated by a variety of chemicals, solvents and heavy metals. Dynamac Corporation completed a Site Inspection Prioritization for the EPA in 1992, which indicated that further assessment was needed under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). However, the EPA concluded that due to relatively low concentrations of contaminants, higher priority sites, and

existing EPA workload, the site was low priority. A request was made by the EPA to FDEP to consider action at the site in August 2000. FIND had no prior knowledge of the contamination or of the EPA findings and was not deemed culpable. The FDEP issued a Notice of Violation and Orders for Corrective Action on March 5, 2001 to the previous landowners, D.D.I. Inc., Estuary Corporation and Spanish Grant Estates Inc. Site remediation is ongoing as of February 2004."

e. Section 4.3.1. General. Add new paragraph three: "Due to the discovery of the contamination from the DDRSF, the DMMA facility had to be redesigned to completely avoid the contaminated area. It is anticipated that the facility will be built to the original dimensions described above once the remediation operations have been completed and approved by FDEP and EPA. However, due to the need to use DU-9 during the Palm Valley dredging currently planned for 2005, the facility will initially be constructed as follows: the buffer area will be approximately 141.27 acres surrounding the 38.75 acre containment facility. Therefore, construction will initially occur on approximately 21% of the site, while 79% will remain as a natural buffer." Paragraph 5, Change sentence one to: "The configuration of the containment basin would provide a buffer on all sides of the site, ranging from 300 to 2,500 ft initially and 300 to 430 ft. once the remediation is complete and the site has been rebuilt to the original dimensions."

f. Section 4.2.2. Water Quality. Delete sentences 5 and 6. Change sentence 7 to "The impacts would be minimized by the construction of drainage ditches, the installation of monitoring wells around the dikes, and the construction of a slurry wall between the DDRSF contamination and the dike. The slurry wall would be a semi permeable bentonite slurry wall that would prevent any potentially seeping saltwater from the containment basin from reaching the contaminated soil and groundwater plume from the DDRSF."

g. Section 4.2.3. Wetlands. Change "3.13 acres" to "2.36 acres."

h. Section 4.2.13. HTRW. Add to the beginning of sentence one: "In addition to the contaminants from the DDRSF, …" Then add new final sentence: "The slurry wall discussed in Section 4.2.2. is designed to prevent the spread of soil or groundwater contamination from the DDRSF. The remediation operations are not complete at the writing of this FEA Addendum, however, it is anticipated that they will be completed and approved by the FDEP and EPA within the not too distant future and preferably prior to Corps use."

4.2 COASTAL ZONE MANAGEMENT (CZM) PROGRAM

a. Appendix VI. Coastal Zone Management Consistency Determination.

i) 13. Chapter 376, Pollutant Spill Prevention and Control. Change to: "Slurry wall design would prevent potential seeping saltwater from contacting contamination from the Dee Dot Ranch Sludge Farm and thereby impacting soils and groundwater."

ii) 17. Chapter 403, Environmental Control. Add new sentence three: "The FDEP is overseeing the remediation of onsite soil and groundwater contamination and issued a permit for the proposed DU-9 DMMA construction project in April of 2000."

4.3 CLEAN WATER ACT

a. New Appendix XI. 404(b)1 Evaluation:

SECTION 404(b)(1) EVALUATION
DREDGED MATERIAL

I. Project Description

a. Location. Intracoastal Waterway, Duval County, Florida.

b. General Description. The proposed construction of Dredged Material Management Area DU-9 would consist of the clearing and grubbing of the site and then the construction of a diked containment basin.

c. Authority and Purpose. Spanning nearly the length of Florida from Jacksonville to Miami, an 8 x 75 ft ICWW channel was authorized January 21, 1927 by House Document 586, 69th Congress, 2nd Session. The present channel configuration (12 x 125 ft) was authorized in 1945 by House Document 740, 79th Congress, 2nd Session. The U.S. Army Corps of Engineers is responsible for maintenance of the channel and the Florida Inland Navigation District serves as the local sponsor.

d. General Description of Dredged or Fill Material

(1) General Characteristics of Material. The material to be utilized for dike construction is the subsoil from within the disposal area site. The material is classified as Myakka and Zolfo fine sands and Wesconnett fine sand.

(2) Quantity of Material. Approximately 160,590 cubic yards of material would be required to construct the diked containment basin initially. However, once site conditions allow, the facility would be expanded and approximately 353,305 cy of material would be required.

(3) Source of Material. The dike material would come from the interior of the site.

e. Description of the Proposed Discharge Site. The material would be moved using heavy earth moving equipment from the interior to the exterior of the site thus creating the diked containment basin.

(1) Size and Location. Dredged Material Management Area DU-9 is a 180 acre site located within a large tract of land, the Dee Dot Ranch, about 0.45 miles west of the IWW and 0.5 miles south of Pablo Creek in a rural part of St. Johns County, Florida. The containment area within the outside toe of the Dike would be 35.0 acres.

(2) Type of Site. The site would be a Dredged Material Management Area (DMMA) along the IWW.

(3) Type of Habitat. DU-9 contains eleven land uses / vegetative communities — improved pasture, unimproved pasture, palmetto prairie, pine Flatwoods, coniferous plantation, bay swamp, stream and lake swamp, cypress, freshwater marsh, wet prairie, and roads and highways.

(4) Timing and Duration of Discharge. Construction will be conducted during the

FY04.

f. Description of Disposal Method. The diked containment basin will be formed using heavy earth moving equipment to move the fill material from the interior of the site to the exterior.

II. Factual Determinations

a. Physical Substrate Determinations.

(1) Substrate Elevation and Slope. Current mean site elevation of DU-9 is –+14.87ft NGVD and post construction mean site elevation would be +11.72ft NGVD. Proposed dike slopes of 1V:3H will provide a dike crest elevation of +31.37ft NGVD.

(2) Sediment Type. Soils at DU-9 are classified as poorly drained Myakka and Zolfo fine sands and very poorly drained Wesconnett fine sand.

(3) Dredged/Fill Material Movement. Fill material would be moved from the interior to the exterior of the site to construct the dikes. The dikes would cover 2.36 acres of isolated, jurisdictional wetlands.

(4) Physical Effects on Benthos. NA

(5) Other Effects. NA

(6) Actions Taken to Minimize Impacts. None.

b. Water Circulation, Fluctuation and Salinity Determinations

(1) Water

(a) Salinity. No impacts to salinity at the construction site.

(b) Water Chemistry. None.

(c) Clarity. None.

(d) Color. None.

(e) Odor. None.

(f) Taste. Not applicable.

(g) Dissolved Gas Levels. NA.

(h) Nutrients. NA.

(i) Eutrophication. NA.

(2) Current Patterns and Circulation. Not applicable.

(3) Normal Water Level Fluctuations. Not applicable.

(4) Salinity Gradients. Not applicable.

(5) Actions That Will Be Taken to Minimize Impacts. The disposal site will be operated to maintain state water quality standards. Slurry wall would prevent seeping salt water from impacting contaminated soils and groundwater.

c. Suspended Particulate/Turbidity Determinations

(1) Expected Changes in Suspended Particulate and Turbidity Levels in Vicinity of Disposal Sites. There will be a short-term increase in the suspended particulate/turbidity in the runoff from the construction area. Levels should not exceed state standard.

(2) Effects (degree and duration) on Chemical and Physical values

(a) Light penetration. Slight light penetration reduction will be temporarily experienced at the construction site.

(b) Dissolved Oxygen. NA

(c) Toxic Metals and Organics. NA

(d) Pathogens. Not Applicable.

(e) Aesthetics. No appreciable impact at the disposal site because of the remoteness of the area.

(f) Others as Appropriate. None.

(3) Effects on Biota (consider environmental values in sections 230.21, as appropriate)

(a) Primary Production, Photosynthesis. Little or no impact is expected.

(b) Suspension/Filter Feeders. Little or no impact is expected.

(c) Sight Feeders. Little or no impact is expected.

(4) Actions taken to Minimize Impacts. None.

d. Contaminant Determinations. Contamination in the Unimproved Pasture (211) area of the central site was first identified in 1988. Remediation was begun in 2001 and continues to this day. It is anticipated the remediation will be complete within the near future. The containment basin was redesigned, however, to avoid this area completely. In addition, a slurry wall was designed to prevent any potentially seeping salt water from the containment basin from coming in contact with the contaminated soils and groundwater. Once the

remediation is complete, the facility will be expanded to cover the contaminated area in order to meet the projected 50-year dredged material disposal needs of this reach of the IWW.

e. Aquatic Ecosystem and Organism Determinations

(1) Effects on Plankton. None.

(2) Effects on Benthos. None.

(3) Effects on Nekton. None.

(4) Effects on Aquatic Food Web. None.

(5) Effects on Special Aquatic Sites.

(a) Sanctuaries and Refuges. None.

(b) Wetlands. The isolated wetlands would be eliminated. As mitigation, 6.3 acres of forested and emergent wetlands would be constructed onsite.

(c) Mud Flats. Not applicable.

(d) Vegetated Shallows. None would be affected.

(e) Coral Reefs. Not applicable.

(f) Riffle and Pool Complexes. Not applicable.

(6) Threatened and Endangered Species. None would be affected.

(7) Other Wildlife. None would be affected.

(8) Actions to Minimize Impacts. Standard Migratory bird and Gopher Tortoise measures would be followed during construction to avoid impacts to these species.

f. Proposed Disposal Site Determinations

(1) Mixing Zone Determination. Not applicable.

(2) Determination of Compliance with Applicable Water Quality Standards. Surface water run-off will be controlled to meet State standards and NPDES requirements for disposal area construction.

(3) Potential Effects on Human Use Characteristic

(a) Municipal and Private Water Supply. Monitoring wells have been installed around the DMMA to ensure that contamination does not occur.

(b) Recreational and Commercial Fisheries. NA.

(c) Water Related Recreation. Not applicable.

(d) Aesthetics. A vegetated buffer will be maintained between the dike and the surrounding properties.

(e) Parks, National and Historical Monuments, National Seashores, Wilderness Areas, Research Sites, and Similar Preserves. None.

g. Determination of Cumulative Effects on the Aquatic Ecosystem. There would be no long-term adverse impact on the adjacent aquatic environment from the construction and use of this site.

h. Determination of Secondary Effects on the Aquatic Ecosystem. Not applicable.